

United States District Court
Northern District of California

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

X ONE, INC.,

Plaintiff,

v.

UBER TECHNOLOGIES, INC.,

Defendant.

Case No. 16-CV-06050-LHK

**ORDER DENYING DEFENDANT’S
MOTION TO DISMISS**

Re: Dkt. No. 24

Plaintiff X One, Inc. (“X One” or “Plaintiff”) filed a patent infringement suit against Defendant Uber Technologies, Inc. (“Uber” or “Defendant”) and alleged that Defendant infringed the claims of U.S. Patent Nos. 8,798,647 and 8,798,593. Before the Court is Defendant’s Motion to Dismiss Pursuant to Federal Rule of Civil Procedure 12(b)(6). ECF No. 24 (“Mot.”). Having considered the submissions of the parties, the relevant law, and the record in this case, the Court DENIES Defendant’s Motion to Dismiss.

I. BACKGROUND

A. Factual Background

1. The Parties

Plaintiff X One is a Delaware corporation with its primary place of business in Union City,

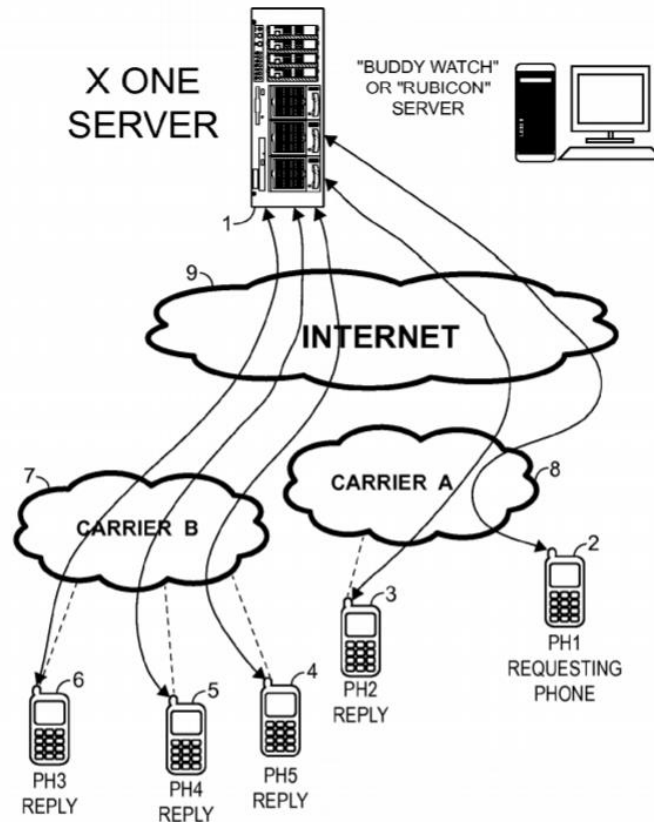
California. ECF No. 1 (“Compl.”) ¶ 1. Plaintiff is the original patent applicant and assignee of the X One Patents. *Id.* Ex. A. The patented technology was developed by Plaintiff’s principal, Richard Haney. *Id.* ¶ 7. Defendant Uber is a Delaware corporation with its primary place of business in San Francisco, California. *Id.* ¶ 2.

2. The X One Patents

At issue are U.S. Patent Nos. 8,798,647 (the “’647 patent”) and 8,798,593 (the “’593 patent”) (collectively, the “X One Patents”). Compl. ¶ 11. The ’593 patent is titled “Location Sharing and Tracking Using Mobile Phones or Other Wireless Devices.” Compl. Ex. B (’593 patent). The ’647 patent is titled “Tracking Proximity of Services Provider to Services Consumer.” Compl. Ex. A (’647 patent). The application for the ’647 patent was a continuation of the patent application that issued as the ’593 patent, and thus the two patents share the same specification. *See Monsanto Co. v. Scruggs*, 459 F.3d 1328, 1337 (Fed. Cir. 2006) (“The patents are continuations or divisionals of a common parent application and therefore necessarily have almost identical specifications.”). For simplicity, unless specifically referring to the ’593 patent or the ’647 patent, the Court’s citations to the text and figures of the X One Patents refer to the ’593 patent specification.

The X One Patents relate to “[a] system for exchanging GPS or other position data between wireless devices.” ’593 patent at Abstract. The invention thus involves “phones [or] other wireless devices” that “are programmed with software . . . to allow mutual tracking and optional position mapping displays of members of groups.” *Id.* at col. 2:35–40. These devices “work with a . . . server coupled to the internet.” *Id.* Critically, these devices “must be web enabled to send and receive TCP/IP or other protocol packets over the internet to the . . . server.” *Id.* at col. 2:25–27. The devices also contain GPS receivers, and, in preferred embodiments, “sufficiently large liquid crystal displays.” *Id.* at col. 2:23–24.

The specification provides the following diagram of the contemplated communications between the devices that form the invention:

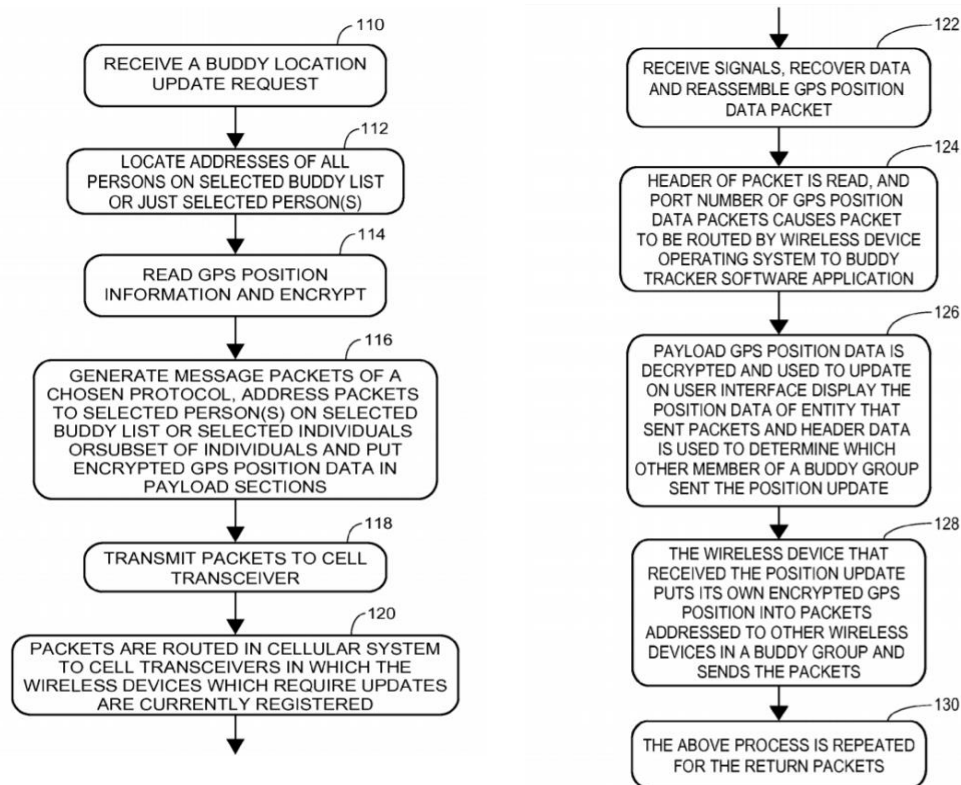


Id. at Fig. 2A.

The specification describes the communications that occur to make the invention function. The requesting phone sends packets through the local phone carrier system, which is then relayed through the internet to a server. *Id.* col. 5:59–6:28. The server then obtains the relevant data from the phones associated with individuals on a buddy list for the requesting phone. *Id.* The server then relays the requested information—location data for each phone associated with a “buddy” and a map showing that location—back to the requesting phone through the internet and carrier service. *See also id.* col. 2:51–64 (“[T]he process of the invention [] allows exchanging and mapping of position data with persons on a Buddy List.”).

However, the specification is not solely limited to the use of a server, and outlines a more generalized process as well for the functioning of the invention. Figure 13 of the X One Patents

provides a “flowchart of the method of exchanging GPS position data among cell phones of a watch list”:



Id. at Figure 13A & 13B.

In this illustrated method, a buddy location update request is received, the persons in the buddy list are identified, and the requesting device sends, through the cellular system, its location data to the phones in the buddy list. *Id.* Those phones receive the information, interpret it, and display that location on a map, and then obtain their own position and send their location to the people on their buddy list. *Id.*

Notably, “[t]he teachings of the invention do not require development of new cell phone or [personal digital assistant] technology nor do they require development of new cellular communication infrastructure.” *Id.* at col. 2:44–49. The server used with the invention is “not limited to any specific language or technology nor is it limited to any specific wired or wireless solution or any particular transmission physical layer or protocol.” *Id.* at col. 2:41–43. Thus, the

1 disclosure concentrates on the method and software used to implement it on current systems.

2 According to the X One Patents, the prior art did not disclose a similar device. The X One
3 Patents' specification states that the prior art included devices like OnStar, which only provided
4 "one way location sharing." *Id.* at col. 1:32–35. That service functioned "via GPS receivers and
5 cellular phone capability built into a car, [which allowed] an aid center [to] track cars all over the
6 world." *Id.* Similarly, the specification's description indicated that the prior art disclosed "[o]ther
7 commercial services [that] allow parents to track the locations of their children." *Id.* Parents
8 could "buy phones that were set up at the manufacturer to enable parents to locate [up to eight]
9 children." *Id.* at col. 1:54–55.

10 However, this prior art did not allow "two way position information sharing" where, for
11 example, the child could track the location of the parent at the same time the parent was tracking
12 the location of the child. *Id.* Additionally, the prior art allegedly did not include a "mechanism to
13 add groups and members of groups" to the list of people being tracked. Nor did the prior art have
14 a mechanism to add "instant buddies," defined as "temporary location sharing between phones on
15 an ask and accept basis which automatically expires after a configurable interval terminates." *Id.*
16 at col. 1:60–65.

17 Although the prior art in the field did not allow changes to the individuals being tracked,
18 the teachings of the X One Patents allegedly allow "the users [to] change things on the fly in the
19 field." *Id.* at col. 3:20. Specifically, the X One Patents allow users, without manufacturer
20 intervention, to "add[] groups and members; add[] instant buddies, chang[e] the size of the area in
21 which their buddies can be tracked, [and] enabl[e] or disabl[e] the location information sharing
22 function without disabling the phone." *Id.* at col. 3:20–25.

23 Although a number of the preferred embodiments disclosed in the specification use cell
24 phones with an installed application, the X One Patents' specifications note that the teachings of
25 the invention "can also be integrated into other products and services." *Id.* at col. 3:3–4.
26 Specifically, through modifications in other devices, the teachings of the invention could be used
27 with "autos with GPS based navigation systems" or "handheld GPS navigation devices." *Id.* at

col. 3:5–19.

3. The Asserted Claims

In the complaint, Plaintiff asserts that Defendant infringes claim 19 of the '593 patent and claims 22 and 28 of the '647 patent ("asserted claims"). Compl. ¶¶ 61, 82. The parties' briefing addresses only these three claims. Mot. at 4; Opp'n at 9–11.

The text of claim 19 of the '593 patent is as follows:

19. An apparatus, comprising:

a server;

a database representing an account for a first individual, the account having an associated buddy list that identifies multiple users;

software to request and store position information associated with cell phones of plural ones of the multiple users by receiving information from cell phones associated with the respective multiple users in a manner not requiring concurrent voice communications; and

software responsive to a request from the first individual to obtain a map, to obtain a last known position for multiple users identified by the buddy list, to plot the last known location of at least two of the multiple users on the map, to transmit the map with plotted locations to the first individual, and to permit the first individual to change geography represented by the map by zooming the map and to responsively transmit to the first individual a map representing the changed geography with plotted position of at least one of the multiple users, each in a manner not requiring concurrent voice communications.

'593 Patent at col. 30:49–col. 31:2.

The text of the asserted claims, claims 22 and 28, of the '647 patent is as follows:

22. A method of tracking proximity of position associated with a first wireless device relative to position of a second wireless device, wherein the first wireless device is associated with a requestor of a desired service and the second wireless device is associated with a provider of the desired service, the method comprising:

selecting the provider of the desired service in association with an application launched by the requestor on the first wireless device, wherein the second wireless device is associated with the provider and is thereby selected in associated [sic] with launch of the application;

causing receipt of information on the first wireless device representing position of the provider, dependent on global positioning system (GPS) position data provided by the second wireless device, and receipt of information representing a map associated with the position associated with

the first wireless device and the position of the second wireless device;

causing display of the map on the first wireless device with the position associated with the requestor and the position of the second wireless device rendered thereon; and

causing receipt of information on the first wireless device representing intermittent positional update dependent on GPS position data provided by the second wireless device, and causing update of display of the map on the first wireless device with respective position associated with the first wireless device and positional update dependent on the GPS position data provided by the second wireless device rendered thereon;

wherein selecting the provider of the desired service includes forming a use-specific group to have the first wireless device and the second wireless device in connection with the request for the desired service.

28. An apparatus comprising instructions stored on non-transitory machine-readable media, the instructions when executed operable to:

cause receipt of information on the first wireless device representing position of the second wireless device and a map associated with position associated with the first wireless device and the position of the second wireless device;

cause display of the map on the first wireless device with the position association with the first wireless device and the position of the second wireless device rendered thereon; and

cause receipt of information on the first wireless device representing positional update of the second wireless device, and cause update of display of the map on the first wireless device with the position associated with the first wireless device and updated position of the second wireless device rendered thereon;

wherein one of the first wireless device and the second wireless device is associated with a provider of a desired service, wherein the update of the display is to [be] performed to indicate proximity of and direction between the provider of the desired service and a position associated with a requestor of the desired service, wherein the causing of the receipt of the information representing the position, the causing of the display, and the causing of the receipt of information representing positional update are invoked responsive to launching an application on the first wireless device in connection with a request by the requestor for the desired service, wherein the provider is selected in connection with the request for the desired service, wherein the instructions when executed are to cause formation of a use-specific group to have the first wireless device and the second wireless device in connection with the request for the desired service.

'647 Patent at col. 30:47–col. 31:12, col. 31:37–col. 32:5.

B. Procedural History

On October 19, 2016, Plaintiff filed the instant patent infringement suit. In its complaint, Plaintiff alleged that Defendant “has infringed and continues to infringe one or more claims of the [X One Patents].” Compl. ¶ 13. The products and services accused included “Uber’s mobile device applications on iOS, Android, and Microsoft operating systems” as well as “the Uber ride-sharing, car-pooling, and delivery services.” *Id.*

On December 9, 2016, Defendant filed the instant Motion to Dismiss, ECF No. 24 (“Mot.”). Defendant also filed a request for judicial notice on December 9, 2016.¹ ECF No. 25. On January 6, 2017, Plaintiff filed an opposition to Defendant’s Motion to Dismiss, ECF No. 35 (“Opp’n”), and on January 13, 2017, Defendant filed a reply, ECF No. 38 (“Reply”).

II. LEGAL STANDARD

A. Motion to Dismiss Pursuant to Federal Rule of Civil Procedure 12(b)(6)

Pursuant to Federal Rule of Civil Procedure 12(b)(6), a defendant may move to dismiss an action for failure to allege “enough facts to state a claim to relief that is plausible on its face.” *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007). “A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged. The plausibility standard is not akin to a ‘probability requirement,’ but it asks for more than a sheer possibility that a defendant has acted unlawfully.” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (internal citations omitted). For purposes of ruling on a Rule 12(b)(6) motion, the Court “accept[s] factual allegations in the

¹ Defendant requests judicial notice of two patents that are listed in the specification of the X One Patents, U.S. Patent Nos. 6,169,902 and 7,116,985. On a motion to dismiss, the Court is limited to “allegations contained in the pleadings, exhibits attached to the complaint, and matters properly subject to judicial notice.” *Akhtar v. Mesa*, 698 F.3d 1202, 1212 (9th Cir. 2012). The Court may take judicial notice of facts not subject to reasonable dispute that “can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned.” Fed. R. Evid. 201(b). “[M]atters of public record” are the appropriate subjects of judicial notice. *Lee v. City of Los Angeles*, 250 F.3d 668, 689 (9th Cir. 2001), *overruled on other grounds by Galbraith v. Cty. of Santa Clara*, 307 F.3d 1119, 1125–26 (9th Cir. 2002). Patents are “matter[s] of public record and the proper subject of judicial notice.” *Sebastian Brown Prods. LLC v. Muzooka Inc.*, 2016 WL 949004, at *5 (N.D. Cal. Mar. 14, 2016). Accordingly, the Court GRANTS Defendant’s request for judicial notice of U.S. Patent Nos. 6,169,902 and 7,116,985.

complaint as true and construe[s] the pleadings in the light most favorable to the nonmoving party.” *Manzarek v. St. Paul Fire & Marine Ins. Co.*, 519 F.3d 1025, 1031 (9th Cir. 2008).

Nonetheless, the Court is not required to “assume the truth of legal conclusions merely because they are cast in the form of factual allegations.” *Fayer v. Vaughn*, 649 F.3d 1061, 1064 (9th Cir. 2011) (quoting *W. Mining Council v. Watt*, 643 F.2d 618, 624 (9th Cir. 1981)). Mere “conclusory allegations of law and unwarranted inferences are insufficient to defeat a motion to dismiss.” *Adams v. Johnson*, 355 F.3d 1179, 1183 (9th Cir. 2004); accord *Iqbal*, 556 U.S. at 678. Furthermore, “a plaintiff may plead [him]self out of court” if he “plead[s] facts which establish that he cannot prevail on his . . . claim.” *Weisbuch v. Cty. of L.A.*, 119 F.3d 778, 783 n.1 (9th Cir. 1997) (quoting *Warzon v. Drew*, 60 F.3d 1234, 1239 (7th Cir. 1995)).

B. Motions to Dismiss for Patent Validity Challenges Under 35 U.S.C. § 101

Defendant’s Motion asserts that the X One Patents fail to claim patent-eligible subject matter under 35 U.S.C. § 101 in light of the United States Supreme Court’s decision in *Alice Corp. Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347 (2014). Whether a claim recites patent-eligible subject matter under § 101 is a question of law. *In re Roslin Inst. (Edinburgh)*, 750 F.3d 1333, 1335 (Fed. Cir. 2014) (“Section 101 patent eligibility is a question of law[.]”); *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012) (same). Accordingly, a district court may resolve the issue of patent eligibility under § 101 by way of a motion to dismiss. *See, e.g., Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343, 1345 (Fed. Cir. 2014) (affirming determination of ineligibility made on 12(b)(6) motion); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 713 (Fed. Cir. 2014) (same); *see also buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1351 (Fed. Cir. 2014) (affirming determination of ineligibility made on motion for judgment on the pleadings).

Although claim construction is often desirable, and may sometimes be necessary, to resolve whether a patent claim is directed to patent-eligible subject matter, the Federal Circuit has explained that “claim construction is not an inviolable prerequisite to a validity determination under § 101.” *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Can. (U.S.)*, 687 F.3d 1266, 1273–

1274 (Fed. Cir. 2013). Where the court has a “full understanding of the basic character of the claimed subject matter,” the question of patent eligibility may properly be resolved on the pleadings. *Content Extraction*, 776 F.3d at 1349; *see also Cardpool, Inc. v. Plastic Jungle, Inc.*, 2013 WL 245026, at *4 (N.D. Cal. Jan. 22, 2013) (same), *aff’d*, 817 F.3d 1316 (Fed. Cir. 2016).

5 **III. DISCUSSION**

6 As noted above, Defendant contends that the asserted claims of the X One Patents “invoke
7 an abstract idea without adding any inventive concept.” Mot. at 6. Defendants therefore argue
8 that dismissal is appropriate because the asserted claims “cannot survive scrutiny” under 35
9 U.S.C. § 101.

10 Section 101 of Title 35 of the United States Code “defines the subject matter that may be
11 patented under the Patent Act.” *Bilski v. Kappos*, 561 U.S. 593, 601 (2010). Under § 101, the
12 scope of patentable subject matter encompasses “any new and useful process, machine,
13 manufacture, or composition of matter, or any new and useful improvement thereof.” *Id.* (quoting
14 35 U.S.C. § 101). These categories are broad, but they are not limitless. Section 101 “contains an
15 important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not
16 patentable.” *Alice*, 134 S. Ct. at 2354 (quotation marks omitted). These three exceptions are not
17 patent-eligible because “they are the basic tools of scientific and technological work,” which are
18 “free to all men and reserved exclusively to none.” *Mayo Collaborative Servs. v. Prometheus*
19 *Labs., Inc.*, 566 U.S. 66, 70 (2012) (quotation marks omitted). The United States Supreme Court
20 has explained that allowing patent claims for such purported inventions would “tend to impede
21 innovation more than it would tend to promote it,” thereby thwarting the primary object of the
22 patent laws. *Id.* at 70. However, the United States Supreme Court has also cautioned that “[a]t
23 some level, all inventions embody, use, reflect, rest upon, or apply laws of nature, natural
24 phenomena, or abstract ideas.” *Alice*, 134 S. Ct. at 2354 (quotation marks and alterations
25 omitted). Accordingly, courts must “tread carefully in construing this exclusionary principle lest it
26 swallow all of patent law.” *Id.*

27 In *Alice*, the leading case on patent-eligible subject matter under § 101, the United States

Supreme Court refined the “framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts” originally set forth in *Mayo*, 566 U.S. at 77. This analysis, generally known as the “*Alice*” framework, proceeds in two steps as follows:

First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts. If so, we then ask, “[w]hat else is there in the claims before us?” To answer that question, we consider the elements of each claim both individually and “as an ordered combination” to determine whether the additional elements “transform the nature of the claim” into a patent-eligible application. We have described step two of this analysis as a search for an “‘inventive concept’”—i.e., an element or combination of elements that is “sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.”

Alice, 134 S. Ct. at 2355 (citations omitted and alterations in original); *see also In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (describing “the now familiar two-part test described by the U.S. Supreme Court in *Alice*”).

The parties do not dispute that the methods of the asserted claims fall within the broad categories identified in 35 U.S.C. § 101 (i.e., as a “process” or “machine”). Instead, Defendants argue that the asserted claims constitute unpatentable “abstract ideas.” *Alice*, 134 S. Ct. at 2354 (quotation marks omitted). To address this argument, the Court turns to the application of the *Alice* framework described above to the asserted claims of the X One Patents.

A. *Alice* Step One—Whether the Asserted Claims Are Directed to an Abstract Idea

The Court “must first determine whether the claims at issue are directed to [an abstract idea].” *Id.* at 2355. Neither the United States Supreme Court nor the Federal Circuit has set forth a bright line test separating abstract ideas from concepts that are sufficiently concrete so as to require no further inquiry under the first step of the *Alice* framework. *See, e.g., id.* at 2357 (noting that “[the United States Supreme Court] need not labor to delimit the precise contours of the ‘abstract ideas’ category in this case”); *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (observing that the United States Supreme Court did not “delimit the precise contours of the ‘abstract ideas’ category in *Alice*”) (quotation marks omitted). As a result, in

1 evaluating whether particular claims are directed to patent-ineligible abstract ideas, courts have
2 generally begun by “compar[ing] claims at issue to those claims already found to be directed to an
3 abstract idea in previous cases.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir.
4 2016).

5 In addition, courts look to whether the process at issue has an analog in the “brick-and-
6 mortar” context. *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1317 (Fed. Cir.
7 2016) (“*Intellectual Ventures B*”) (finding an email processing software program to be abstract
8 through comparison to a “brick-and-mortar” post office). Similarly, the Federal Circuit has
9 considered whether the claims are, in essence, directed to a mental process or a process that could
10 be done with pen and paper. *See, e.g., CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d
11 1366, 1372 (Fed. Cir. 2011) (claim for verifying the validity of a credit card transaction over the
12 Internet was invalid because the “steps can be performed in the human mind, or by a human using
13 a pen and paper”).²

14 Moreover, when computer-related claims are at issue, courts look to whether the claims
15 purport to “improve the functioning of the computer itself,” which may suggest that the claims are
16 not abstract. *Alice*, 134 S. Ct. at 2359. Thus, claims that recite improvements in computer
17 functionality are patent eligible. *See Enfish*, 822 F.3d at 1339 (method for improving “the way a
18 computer stores and retrieves data in memory” was non-abstract); *McRO v. Bandai Namco Games*
19 *Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016) (claims “focused on a specific asserted
20 improvement in computer animation” were non-abstract). However, if “computers are invoked
21 merely as a tool” in the asserted claim to carry out an abstract process, the claim is still considered
22 to be abstract. *Enfish*, 822 F.3d at 1336.

23 With these principles in mind, the Court turns to the case at hand. As discussed above, the
24

25 ² One court has noted that, like all tools of analysis, the “pencil and paper” analogy must not be
26 unthinkingly applied. *See California Inst. of Tech. v. Hughes Commc’ns Inc.*, 59 F. Supp. 3d 974,
27 995 (C.D. Cal. 2014) (viewing pencil-and-paper test as a “stand-in for another concern: that
28 humans engaged in the same activity long before the invention of computers,” and concluding that
test was unhelpful where “error correction codes were not conventional activity that humans
engaged in before computers”).

1 Court’s task at this first step of the *Alice* framework is to examine the claims “in their entirety to
 2 ascertain whether their character as a whole is directed to excluded subject matter.” *Internet*
 3 *Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015). Here, Defendants
 4 contend that the asserted claims’ “‘character as a whole’ is directed to the abstract concept of
 5 gathering and displaying position information of wireless device users.” Mot. at 1; *see also id.* at
 6 8 (“But to the extent they describe a purported advance, it is on gathering and displaying
 7 information of a specified content, and not on any particular inventive technology for performing
 8 either function.”). Defendant argues that “[t]he Federal Circuit repeatedly has declared processes
 9 of information collection and analysis similar to those reflected by the ’593 and ’647 patent claims
 10 to be abstract.” *Id.* at 9. Additionally, Defendant argues that the asserted claims fail “to recite the
 11 technical details for how to achieve the claimed collection and display of position information of
 12 wireless device users.” *Id.* at 13.

13 Plaintiff responds that Defendant has described the claims at an excessively high level of
 14 abstraction. Plaintiffs argue that the claims are instead directed to “the sharing of location data
 15 among specific groups of people, using self-updating maps, for limited time periods, without
 16 concurrent voice communications.” Opp’n at 17. When read in this manner, Plaintiff argues that
 17 the claims “address the technological problems of how to share location information between
 18 devices without overtaxing system resources or violating individual privacy concerns.” *Id.* at 9.
 19 Moreover, Plaintiff argues that the claims do not preempt every way of “gathering and displaying
 20 position information of wireless device users,” and that the cases cited by Defendant are
 21 inapposite because the claims in those cases did not involve specific technical solutions to
 22 technological problems. Opp’n at 13–17.

23 The Court first discusses the character of each of the asserted claims, and then discusses
 24 whether prior cases or other tests approved by the Federal Circuit indicate that the claims are
 25 directed towards an abstract idea.

26 **1. Character of the Claims**

27 The Court begins by examining each asserted claim in its entirety to understand the

character of each claim as a whole. *Ultramercial*, 772 F.3d at 714 (“We first examine the claims because claims are the definition of what a patent is intended to cover”); *Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1341 (Fed. Cir. 2013) (“[T]he court must first identify and define whatever fundamental concept appears wrapped up in the claim.”) (quotation marks omitted); *Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1348 (2016) (discussing the “basic thrust” of the claims). This “‘directed to’ inquiry applies a stage-one filter to claims, considered in light of the specification, based on whether their character as a whole is directed to excluded subject matter.” *Enfish*, 822 F.3d at 1335. In distilling the purpose of a claim, the Court is careful not to express the claim’s fundamental concept at an unduly “high level of abstraction . . . untethered from the language of the claims,” but rather at a level consonant with the level of generality or abstraction expressed in the claims themselves. *Id.* at 1336.

However, the Court need not include every claim limitation in the “directed to” inquiry. *See, e.g., Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (“Our cases generally follow the step one/step two Supreme Court format, reserving step two for the more comprehensive analysis in search of the ‘inventive concept.’”); *Ultramercial*, 772 F.3d at 715 (describing “the concept embodied by the *majority* of the limitations” despite presence of other limitations) (emphasis added). Instead, the Court only need include limitations that are part of the asserted claims’ essential character, omitting claim limitations that are “secondary to (and dependent upon)” the major focus of a claim. *See Papst Licensing GmbH & Co. KG v. Xilinx Inc.*, 2016 WL 3196657, at *13 (N.D. Cal. June 9, 2016) (finding that the display of an error message from a simulator was secondary to the use of a simulator itself); *see also Ultramercial*, 772 F.3d at 715 (“[T]he addition of merely novel or non-routine components to the claimed idea [does not] necessarily turn[] an abstraction into something concrete.”).

Here, the Court first addresses the claim from the ’593 patent and then addresses the claims from the ’647 patent. As noted above, the Federal Circuit has referred to the inquiry in this section as a determination of the “heart,” the “fundamental concept,” the “character as a whole,” or the “basic thrust” of the claim. The Court understands this terminology to be interchangeable.

1 However, for simplicity, the Court uses the term “character as a whole” throughout this order.

2 **a. The ’593 patent**

3 Claim 19 of the ’593 patent describes an “apparatus” with the following four elements:
 4 (1) a server, (2) a database with an account for a user that contains a “buddy list” of other users,
 5 (3) software that can “request and store” information from cell phones associated with multiple
 6 users, and (4) software that, upon request from a first user, obtains the last known location of users
 7 listed in the first user’s buddy list, plots those locations on a map, sends that map to the first user,
 8 and allows the first user to zoom the map in or out. ’593 patent at col. 30:49–col. 31:2. This
 9 apparatus functions “without concurrent voice communications.” *Id.*

10 After reading the entirety of claim 19 for its character as a whole, the Court finds that
 11 claim 19 of the ’593 patent is “directed to” (1) the gathering, transmission, and display of the
 12 location information of (2) a certain subset of individuals from a list. The Court reaches this
 13 conclusion by reading the entirety of the claim for its character as a whole and, through doing so,
 14 observing that all four of its elements are aimed at gathering, transmitting, or displaying the
 15 location information of a certain subset of individuals from a list. The server, as understood from
 16 the specification, is an intermediary between the two or more cell phones that mediates the
 17 transmission of location information. ’593 patent at Fig. 2A. The database stores the list that
 18 defines which individuals will be tracked. *Id.* at col. 30:49–51. The two pieces of software
 19 “request and store” the location information of other users, transmit that information to a
 20 requesting person’s cell phone, and display that information. *Id.*

21 The Court identifies the above character as a whole by considering claim 19 of the ’593
 22 patent in light of the specification. The specification states that the ’593 patent is “[a] system for
 23 exchanging GPS or other location data between wireless devices” in which an “application
 24 communicates with the GPS receiver and other wireless devices operated by buddies registered in
 25 the user’s phone.” ’593 patent at Abstract; *see also Bascom*, 827 F.3d at 1348 (finding that “[t]he
 26 specification reinforces [the claims being directed to filtering Internet content] by describing the
 27 invention as relating ‘generally to a method and system for filtering Internet content.’”); *cf. Enfish*,

822 F.3d at 1337 (observing that “[t]he necessity of describing the claims in such a way is underscored by the specification’s emphasis that ‘the present invention comprises a flexible, self-referential table that stores data.’”).

However, the Court acknowledges that this formulation of the character of the claim excludes some claim limitations, including the “zoom” feature on the map display and the lack of “concurrent voice communications.” *Id.* While these are features of claim 19 of the ’593 patent, they are secondary to the claim’s character as a whole. Indeed, the “zoom” feature is simply a more flexible way of displaying the location of the individuals on the list. *Compare Papst*, 2016 WL 3196657 at *13 (holding that the character of the claims involved the use of a simulator to perform a memory test and did not include the “error messages” that would display when the simulator failed because the error messages were not part of the claims’ “dominant concept”). Moreover, the lack of “concurrent voice communications” adds little to the character of the claim as it simply narrows the mode of gathering, transmitting, and displaying the location information of a certain subset of individuals from a list and does not alter the overall character of the claim. *See Affinity Labs of Texas, LLC v. DirecTV, LLC*, 838 F.3d 1253, 1258 (Fed. Cir. 2016) (not finding “use of internet” to be part of the character of the claim as a whole even though the claim required internet usage).

Plaintiffs also argue that the following claim limitations—the presence of “self-updating maps” and the ability for the location sharing to be for a “limited time period”—should be read into the character as a whole of claim 19 of the ’593 patent. Opp’n at 17. These features—a “self-updating map[]” and the ability to track people for a “limited time period”—are mentioned in claims 8, 9, and 10 of the ’593 patent. However, Plaintiff does not assert that Defendant infringes these claims in the complaint. With respect to the ’593 patent, Plaintiff only asserts that Defendant infringes claim 19. These features are not mentioned in claim 19 of the ’593 patent. Moreover, claims 8, 9, and 10 of the ’593 patent were not specifically mentioned in Plaintiff’s briefing. The Court need not consider claims that Plaintiff has not asserted in the complaint. *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1149 (Fed. Cir. 2016) (citations omitted)

1 (“The § 101 inquiry must focus on the language of the Asserted Claims themselves.”). Thus, the
2 Court need not consider whether these limitations should be read into claim 19’s character as a
3 whole.

4 However, even if the Court were to consider claims 8, 9, and 10 of the ’593 patent and
5 their additional claim limitations, the Court finds below, in the context of the ’647 patent, that the
6 “self-updating map” or ability to track people for a “limited time period” features do not affect the
7 character of the claim as a whole. The same analysis would also apply to the ’593 patent.

8 The level of abstraction used here is comparable to Federal Circuit precedent addressing
9 similar claims. In *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir.
10 2016), the Federal Circuit discussed the patentability of a claim for a “method of detecting events
11 on an interconnected electric power grid in real time over a wide area and automatically analyzing
12 the events on the interconnected electric power grid.” *Id.* at 1351. The method included (1)
13 receiving data streams collected in real-time from geographically distinct points over an electric
14 power grid, (2) receiving data from power sources on the electric power grid, (3) receiving data
15 from other non-grid data sources, (4) detecting and analyzing events based on the information
16 from measurements in the received data, (5) displaying the results of the diagnosis of the events at
17 issue and other information from the data, (6) updating the information that is collected, and (7)
18 combining the data into an indicator of power grid health. *Id.* at 1351–52. The Federal Circuit
19 found that the “character as a whole” of this claim was “collecting information, analyzing it, and
20 displaying certain results of the collection and analysis.” *Id.* at 1353.

21 The character as a whole of claim 19 of the ’593 patent described by the Court—the
22 gathering, transmission, and display of location information of a certain subset of individuals from
23 a list—involves a similar level of abstraction and thus is the correct statement of claim 19’s
24 character as a whole.

25 c. The ’647 Patent

26 The asserted claims from the ’647 patent are similar to claim 19 of the ’593 patent, but
27 relate to the gathering, transmission, and display of the location information of individuals

requested to perform a service rather than a certain subset of individuals from a list. For example, claim 22 of the '647 patent states the following method: (1) the service requestor selects a service provider through an application on his or her wireless device, (2) the location of the service provider, as determined through GPS on the service provider's wireless device, is transmitted to the service requestor's phone along with a map showing the location of the service requestor and service provider, (3) a map of the service requestor's and service provider's locations are displayed on the service requestor's wireless device, (4) the location of the service requestor and service provider are updated intermittently on the map display on the service requestor's device, and (5) the selection of the service provider creates a "use-specific group . . . in connection with the request for the desired service" that includes the service requestor's and the service provider's wireless devices.³ Accordingly, drawing upon its assessment of claim 19 of the '593 patent, the Court finds that the "character as a whole" of the asserted claims of the '647 patent are "directed to" the (1) gathering, transmission, and display of location information of (2) individuals requested to perform a service.

Two features not present in claim 19 of the '593 patent are present in claims 22 and 28 of the '647 patent: the "self-updating" feature and the "time limit" feature. However, neither of these additional claim limitations changes the character of the claim as a whole. For example, the self-updating feature is simply a timed repetition of the gathering, transmission, and display of location information. Both of these claim limitations are "secondary to (and dependent upon)" the actual gathering, transmission, and display of location information that is at issue in these claims. *Papst*, 2016 WL 3196657 at *13. Indeed, in *Electric Power Group*, even though the claims included an "updating" feature concerning the collection and display of information about a power grid, the Federal Circuit found the claim to be directed to "collecting information, analyzing it, and displaying certain results of the collection and analysis." *Elec. Power Grp.*, 830 F.3d at 1352.

³ Claim 28 of the '647 patent is software used to carry out the method in claim 22 and is essentially the same as claim 22. The main difference is that claim 22 does not specify that the wireless device used for the method have GPS, one of the aspects of claim 28.

Accordingly, the Court concludes that claims 22 and 28 of the '647 patent are directed towards the gathering, transmission, and display of the location information of individuals requested to perform a service.

2. Abstract Idea Analysis

Having determined the character of the asserted claims, the question then is whether the "character as a whole" of the claims is directed to an unpatentable abstract idea. *Enfish*, 822 F.3d at 1335. To perform this analysis, the Court first addresses comparable Federal Circuit precedent, and then discusses the following two Federal Circuit tests: (1) whether the claimed actions are comparable to activity in the "brick-and-mortar" context, and (2) whether the claims constitute an improvement in computer functionality.

a. Comparison to Prior Case Law

As noted above, claim 19 of the '593 patent involves the gathering, transmission, and display of location information of a certain subset of individuals from a list, and claims 22 and 28 of the '647 patent involves the gathering, transmission, and display of location information of individuals requested to perform a service. A number of Federal Circuit and district court cases have addressed the patentability of claims similar, but not identical, to those at issue here. Nevertheless, they provide useful guidance.

First, the Court notes that gathering, transmitting, and displaying information is an abstract idea. Information on its own is "intangible." *Elec. Power Grp*, 830 F.3d at 1353. As a result, claims directed to the collection of information have regularly been held to be abstract, "including when limited to particular content (which does not change its character as information)." *Id.* at 1353 (citing cases). Moreover, "merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis." *Id.*

In *Electric Power Group*, as discussed above, the Federal Circuit applied these principles to a "method of detecting events on an interconnected electric power grid in real time over a wide area and automatically analyzing the events on the interconnected electric power grid." *Id.* at

1 1351. The Federal Circuit found that the “character as a whole” of this claim was “collecting
2 information, analyzing it, and displaying certain results of the collection and analysis.” *Id.* at
3 1353. As relevant here, the Federal Circuit held that the claims were directed to an abstract idea
4 because “[t]he advance the [claims] purport to make is a process of gathering and analyzing
5 information of a specified content, then displaying the results, and not any particular assertedly
6 inventive technology for performing those functions.” *Id.*; see also *In re TLI*, 823 F.3d at 610
7 (holding that method for recording images on a cell phone, transmitting those images to a server,
8 classifying those images, and storing them on the server based on that classification to be an
9 unpatentable abstract idea).

10 Although the Federal Circuit has not addressed a claim involving GPS location tracking,
11 multiple district courts have found that functions pertaining to obtaining and displaying location
12 information are not patentable. For example, in *MacroPoint, LLC v. FourKites, Inc.*, 2015 WL
13 6870118 (N.D. Ohio Nov. 6, 2015), *aff’d*, 2016 WL 7156894 (Fed. Cir. Dec. 8, 2016), a district
14 court in the Northern District of Ohio discussed a claim for “a process for tracking freight” in
15 which a “communications device” was “correlated” to freight. *Id.* at *3. The communications
16 device then received a request, determined the location of the freight, and transmitted the freight’s
17 location. *Id.* at *1. The *MacroPoint* court held the claim to be abstract because the claim
18 “disclose[d] nothing more than a process for tracking freight,” using generic statements such as
19 the “transfer” of electronic signals. *Id.*

20 Similarly, in *Callwave Commc’ns, LLC v. AT&T Mobility, LLC*, 2016 U.S. Dist. LEXIS
21 125486 (D. Del. Sept. 15, 2016), a district court in the District of Delaware addressed a method
22 claim in which (1) a subscriber identified a mobile platform to locate, (2) a remote tracking system
23 for that mobile platform was identified, (3) the location was requested and received from the
24 remote tracking system, and (4) the location was then transmitted to the subscriber. *Id.* at *8. The
25 Court held that the claim was drawn to the abstract idea of “relaying location-related information
26 through an intermediary.” *Id.* at *11. The *Callwave* court held that this claim was abstract
27 because “[r]equesting and receiving location information is an abstract idea, and adding a vaguely

defined intermediary that selectively forwards requests and returns responses does not make the underlying abstract idea any more concrete.” *Id.* at *12–13.

Based on *Electric Power Group*, *Callwave*, and *MacroPoint*, the Court concludes that the claims here are directed to an abstract idea. As discussed above, claim 19 of the ’593 patent is directed to the gathering, transmission, and display of the location information of a certain subset of individuals from a list, and claims 22 and 28 of the ’647 patent are directed to the gathering, transmission, and display of the location information of individuals requested to perform a service. The Federal Circuit has held that the collection and display of information, even if it is limited to “particular content,” is an unpatentable abstract idea. *Elec. Power Grp.*, 830 F.3d at 1353 (holding that the collection and display of certain measurements on an electric power grid constitutes an abstract idea). *Id.* All three claims here describe an apparatus or method that involves (1) a request of location data of individuals, (2) that location data being obtained from the wireless devices of those individuals, (3) a map with the locations of the individual or individuals being transferred to the requestor of the location data. This is similar to the process in *Callwave* where the subscriber identified a “mobile platform to locate”; requested the location of that mobile platform; and then received the location. *Callwave*, 2016 U.S. Dist. LEXIS 125486 at *12–13. Thus, the gathering, transmission, and display of the location information of a certain subset of individuals from a list or of individuals requested to perform a service is analogous to claims the Federal Circuit and district courts have found to be abstract.

The Court next turns to tests the Federal Circuit utilizes to determine whether a claim is abstract. First, the Court discusses whether analogous activities occur in the “brick-and-mortar” context. Second, the Court discusses “whether the claims are directed to an improvement in computer functionality versus being directed to an abstract idea.” *Enfish*, 822 F.3d at 1335.

b. Brick and Mortar Analogy

In finding a claim to be directed to an abstract idea, the Federal Circuit has, at times, analogized claims to activities in the “brick-and-mortar” context. *Intellectual Ventures B*, 838 F.3d at 1317 (finding an email processing software program to be abstract through comparison to

a “brick-and-mortar” post office); *see also DirecTV*, 838 F.3d at 1258 (finding claim abstract because the idea of out-of-region broadcasting of local content “can be implemented in myriad ways ranging from the low-tech, such as by mailing copies of a local newspaper to an out-of-state subscriber, to the high-tech, such as by using satellites to disseminate broadcasts of sporting events.”). Here, despite use of wireless devices and cell phones for the invention in this case, a similar functionality was achievable in the “brick-and-mortar” context without GPS and wireless devices with internet connectivity. Specifically, before GPS tracking and cellular phones, people could track the locations of individuals on a map. For example, a military general that needed information to determine strategy, even before the digital age, could have tracked the movements of friendly and enemy troops on a map using figurines or pushpins based on information obtained from a forward scout. Even a modern person could engage in similar behavior with respect to friends and family. If motivated, a person could call an individual that a person wants to track and place the information received in response on a map. Using GPS and wireless devices likely improves the efficiency of this process and eliminates the effort that would be necessary in the brick and mortar context. However, an improvement in efficiency created by moving to a new technological environment does not render a patent non-abstract. *See Alice*, 134 S. Ct. at 2355 (holding that simply applying a method on a computer does not make an abstract idea even if that technological environment improves the efficiency of the process at issue). Thus, the analogy to the brick-and-mortar context supports a finding that the character of the asserted claims as a whole is directed to an abstract idea.

c. Improvement in Computer Functionality

A claim is not abstract if it “improve[s] the functioning of the computer itself.” *Alice*, 134 S. Ct. at 2359. Thus, *Enfish* held that it is “relevant to ask whether the claims are directed to an improvement in computer functionality versus being directed to an abstract idea, even at the first step of the *Alice* analysis.” 822 F.3d at 1335. The Federal Circuit has issued only two decisions that have found patentable subject matter at *Alice*’s first step. In *Enfish*, the Federal Circuit held that the claims at issue were directed “to a specific improvement to the way computers operate,” in

1 the form of a data structure that used a “self-referential table.” *Enfish*, 822 F.3d at 1335. Rather
2 than simply automating a process using a computer as a tool, the claims involved “a specific type
3 of data structure designed to improve the way a computer stores and retrieves data in memory.”
4 *Id.* at 1337.

5 Similarly, in *McRO v. Bandai Namco Games America Inc.*, the Federal Circuit held that a
6 method for automating the animation of lip movement and facial expressions, which replaced an
7 animator’s subjective evaluation with automated rules, was not an unpatentable abstract idea.
8 *McRO*, 837 F.3d at 1313–16. The Federal Circuit reasoned that because the method involved “a
9 specific asserted improvement in computer animation, i.e., the automatic use of rules of a
10 particular type,” it did not just use a computer “as a tool to automate conventional activity” but
11 instead constituted an improvement to an existing technological process itself. *Id.* at 1314.

12 However, the Federal Circuit has noted that “[a] patent may issue ‘for the means or method
13 of producing a certain result, or effect, and not for the result or effect produced.’” *McRO*, 837
14 F.3d at 1314 (quoting *Diamond v. Diehr*, 450 U.S. 175, 182 n.7 (1981)). Accordingly, the Federal
15 Circuit has declined to find that a case falls under the principles found in *Enfish* and *McRO* when
16 “the claimed invention is entirely functional in nature.” *See, e.g., DirecTV*, 838 F.3d at 1258.
17 Generally, claims that contain improvements in computer functionality, and thus are patentable
18 under *Enfish* and *McRO*, involve instructions on “how to implement” the abstract idea. *Id.*

19 Here, the Court finds that the character of the asserted claims is not itself an improvement
20 in the technology used for gathering, transmitting, and displaying the location information of a
21 certain subset of individuals from a list or individuals requested to perform a service. In both
22 *Enfish* and *McRO*, the character of the claim as a whole was itself a technological advance that
23 improved computer functionality. *See Enfish*, 822 F.3d at 1335 (character of the claim was an
24 improved database structure); *McRO*, 837 F.3d at 1314 (character of claim was an improved
25 means of performing computer animation). Here, the gathering, transmission, and display of the
26 location information of a certain subset of individuals from a list or individuals requested to
27 perform a service does not improve the functioning of a computer.

1 This conclusion is underscored by the fact that the asserted claims are described in
2 functional terms. As noted above, claim 19 of the '593 patent claims the use of a server, a
3 database, and software that obtains the location of cell phones associated with individuals on a
4 buddy list, plots those locations on a map, and then displays that map to the first individual. '593
5 Patent at col. 30:49–col. 31:2. Additionally, claims 22 and 28 of the '647 patent describe a
6 method and software that allow a person to select a service provider on a wireless device, obtain
7 location information from the service provider's wireless device, and display a map showing the
8 location of the service provider on the service requestor's wireless device that intermittently
9 updates. '647 patent at col. 30:47–col. 31:12. These claims simply describe the “effect or result
10 produced” not “how to implement” the desired result. *McRO*, 837 F.3d at 1314 (quoting *Diehr*,
11 450 U.S. at 182 n.7); *DirecTV*, 838 F.3d at 1258. That is, they describe that location information
12 will be gathered, transmitted, and displayed rather than describe how those processes will function
13 or focus on any particular tool that achieves the desired result.

14 Plaintiff argues that the Court should look to particular claim limitations as part of the step
15 one analysis. Opp'n at 115–17 (arguing that the “self-update,” “time-limit,” and other features
16 constitute improvements in technology). In *Bascom*, the Federal Circuit declined to address claim
17 limitations in step one of the *Alice* analysis. *Bascom*, 827 F.3d at 1349. Although the *Bascom*
18 court acknowledged that such an analysis occurred in *Enfish*, the *Bascom* court noted that such an
19 analysis was only appropriate because the claims in *Enfish* were “unambiguously directed to an
20 improvement in computer capabilities.” *Id.* In contrast, the claims in *Bascom* were “directed to
21 filtering content on the Internet,” and, when pressed to consider the impact of more specific claim
22 limitations, the *Bascom* court only concluded that “the claims and their specific limitations do not
23 readily lend themselves to a step-one finding that they are directed to a nonabstract idea.” *Id.* at
24 1348–49.

25 The specific claim limitations identified by Plaintiff present a similar situation here. As
26 discussed above, an assessment of the “character as a whole” of the asserted claims reveals that
27 they are “directed to” known abstract ideas (the gathering, transmission, and display of the

location information of a certain subset of individuals from a list or individuals requested to perform a service). Indeed, the Court concluded above that limitations such as “self-update,” “time-limit,” and other features are not significant enough to change the character of the claims as a whole. Accordingly, as in *Bascom*, the Court “defer[s its] consideration of the specific claim limitations’ narrowing effect for step two” of the *Alice* analysis. *Id.*

Accordingly, the Court finds that claim 19 of the ’593 patent and claims 22 and 28 of the ’647 patent are directed to abstract ideas because the asserted claims are analogous to prior cases where the Federal Circuit found claims to be directed to an abstract idea; the asserted claims’ actions are comparable to activities in the “brick-and-mortar” context; and the asserted claims do not recite improvements in computer functionality.

B. *Alice* Step Two—Evaluation of Abstract Claims for an Inventive Concept

A claim drawn to an abstract idea is not necessarily invalid if the claim’s limitations—considered individually or as an ordered combination—serve to “transform the claims into a patent-eligible application.” *Content Extraction*, 776 F.3d at 1348. Thus, the second step of the *Alice* analysis (the search for an “inventive concept”) asks whether the claim contains an element or combination of elements that ensures that the patent in practice amounts to significantly more than a patent upon the abstract idea itself. *Alice*, 134 S. Ct. at 2355.

The United States Supreme Court has made clear that a transformation of an abstract idea to a patent-eligible application of the idea requires more than simply reciting the idea followed by “apply it.” *Id.* at 2357 (quoting *Mayo*, 566 U.S. at 72). In that regard, the Federal Circuit has repeatedly held that “[f]or the role of a computer in a computer-implemented invention to be deemed meaningful in the context of this analysis, it must involve more than the performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Content Extraction*, 776 F.3d at 1347–48 (quoting *Alice*, 134 S. Ct. at 2359) (alterations in original); see also *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324–25 (Fed. Cir. 2016) (holding that “generic computer components such as an ‘interface,’ ‘network,’ and ‘database’ . . . do not satisfy the inventive concept requirement.”); *Bancorp Servs.*, 687 F.3d at

1 1278 (“To salvage an otherwise patent-ineligible process, a computer must be integral to the
 2 claimed invention, facilitating the process in a way that a person making calculations or
 3 computations could not.”). Similarly, “[i]t is well-settled that mere recitation of concrete, tangible
 4 components is insufficient to confer patent eligibility to an otherwise abstract idea” where those
 5 components simply perform their “well-understood, routine, conventional” functions. *See In re*
 6 *TLI*, 823 F.3d at 613 (limitations of “telephone unit,” “server,” “image analysis unit,” and “control
 7 unit” insufficient to adequately narrow abstract idea of “classifying and storing digital images in
 8 an organized manner” under step two of the Alice framework) (quotation marks omitted).

9 In addition, the United States Supreme Court explained in *Bilski* that “limiting an abstract
 10 idea to one field of use or adding token postsolution components [does] not make the concept
 11 patentable.” *Bilski*, 561 U.S. at 612 (citing *Parker v. Flook*, 437 U.S. 584, 589 (1978)); *see also*
 12 *Alice*, 134 S. Ct. at 2358 (same). The Federal Circuit has similarly stated that attempts “to limit
 13 the use of the abstract idea to a particular technological environment” are insufficient to render an
 14 abstract idea patent-eligible. *Ultramercial*, 772 F.3d at 716 (quotation marks omitted); *see also*
 15 *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1366 (Fed. Cir. 2015)
 16 (“*Intellectual Ventures A*”) (“An abstract idea does not become nonabstract by limiting the
 17 invention to a particular field of use or technological environment, such as the Internet.”).

18 Here, Defendant argues that the claims “recite generic technologies” to “implement the
 19 underlying abstract idea.” Mot. at 17. Indeed Defendant argues that each of the pieces of
 20 technology identified in the claim limitations are conventional and generic: wireless devices, cell
 21 phones, GPS receivers, a server, software, a database, a map with zoom capabilities, and a use
 22 specific group and buddy list. *Id.* at 19. Moreover, Defendant argues that the combination of each
 23 of these elements is conventional and “does not purport to claim a new technology.” Mot. at 19.

24 In response, Plaintiff does not argue that any of the technological components of the claims
 25 provide an inventive concept on their own. Instead, Plaintiff argues that the “ordered
 26 combination” of the claim limitations provides an “inventive concept” that renders the claims
 27 patentable. Opp’n at 21.

The Court's "search for an inventive concept" begins with the individual claim limitations, and then turns to the claim limitations as an "ordered combination."

1. Individual Claim Limitations

The asserted claims here contain many individual claim limitations. The Court first addresses the physical components listed in the claims, then discusses the software and method steps, and finally discusses the "buddy list" and "use specific group." The Federal Circuit has held that an inventive concept is not present where "[t]he claim simply recites the use of generic features of cellular telephones, such as a storage medium and a graphical user interface, as well as routine functions, such as transmitting and receiving signals, to implement the underlying idea." *DirecTV*, 838 F.3d at 1258. Here, the Court finds that the physical components described in all of the claims are generic and conventional, including the claimed "server," "cell phone," "wireless device," and "GPS." See '593 Patent at col. 2: 10–50 ("The functionality implemented by the software of the invention utilizes existing platforms and infrastructure."). The claims contain no indication that these "existing platforms and pieces of infrastructure" are used in a non-conventional manner. See *Bascom*, 827 F.3d at 1349 (finding that "local client computer," "remote ISP server," "Internet computer network," and "controlled access network accounts" contained no inventive concept when looked at individually). Moreover, the "database" in claim 19 of the '593 patent is a generic computer element. See *Intellectual Ventures A*, 792 F.3d at 1366 (a "database" is a "generic computer element[]").

Even the use of "software" identified in claim 19 of the '593 patent, and the steps that the software was required to perform, does not itself provide an inventive concept as the software is simply the medium for carrying out the functions that are the focus of the claim. To be sure, there is no "categorical ban on software patents." *Enfish*, 822 F.3d at 1339. However, the application of a method using software does not provide an inventive concept where the "difficulty of the programming details . . . are not recited in the actual claims." *Apple, Inc. v. Ameranth, Inc.*, 2016 WL 6958650, at *8 (Fed. Cir. Nov. 29, 2016). In claims like those at issue here, where the claims simply recite functions like "request and store position information," the simple statement that the

1 functions are carried out on “software” does not provide an inventive concept.

2 The use of a zoomable map also does not provide an “inventive concept” in this case. The
3 specification provides no indication that the use of maps to display location information was
4 anything but conventional at the time. In fact, the specification notes that the maps are obtained in
5 a conventional manner from then-existing mapping services. *See* ’593 patent at 14:13–22 (“In the
6 preferred embodiment, the Buddy Watch server pulls an appropriate map from the MapQuest
7 server.”). Moreover, other courts have held that a “zoomable” feature is an unpatentable abstract
8 idea. *Peschke Map Techs. LLC v. Rouse Props. Inc.*, 168 F. Supp. 3d 881, 888 (E.D. Va. 2016)
9 (“[T]he use of multiple layers of maps that enables users to zoom into and out of a geographic
10 areas is an unpatentable abstract idea.”). Since the claim on the “map” and its “zoom” functions
11 simply state their presence and not any inventive way of implementing that functionality, the
12 zoomable map does not supply an inventive concept. *See Apple*, 2016 WL 6958950 at *8 (noting
13 that, without details of implementation, adding certain features that are themselves abstract ideas
14 does not provide an inventive concept).

15 Additionally, each of the steps described in the claims for gathering, transmitting, and
16 displaying the location information of a certain subset of individuals from a list or individuals
17 requested to perform a service involves generic, functionally-described steps. For example, claim
18 19 of the ’593 patent notes that the claimed software can “request and store position information”
19 and is “responsive to a request . . . to obtain a map.” *Id.* at col. 30:55–65. The claims in the ’647
20 patent are even more general, as they claim a method with steps like “caus[ing] receipt of
21 information on the first wireless device representing position of the second wireless device.” ’647
22 patent at col. 31:40–44. Functions such as requesting, receiving, and storing information over a
23 network are not inventive. *See buySAFE*, 765 F.3d at 1355 (noting that the use of a “computer
24 network . . . is not even arguably inventive); *Rothschild Location Techs. LLC v. Geotab USA, Inc.*,
25 2016 WL 2847975, at *3 (E.D. Tex. May 16, 2016) (“[A]s the Federal Circuit persistently holds,
26 two computers communicating over a network is not inventive.”).

27 Finally, the Court turns to the remaining element, the use of a “buddy list” in claim 19 of

the '593 patent and the creation of a "use specific group" in claims 22 and 28 of the '647 patent. The Court need not discuss whether the "buddy list" or "use specific group" provide an inventive concept on their own because the Court concludes below that, at the motion to dismiss stage, the use of the "buddy list" or "use specific group," in conjunction with the other features of the invention, provides an "inventive concept."

2. Ordered Combination of Claim Limitations

The Court next turns to whether the "ordered combination" of the claim limitations provides an inventive concept. In making this analysis, the Court looks to the Federal Circuit's decisions in *Bascom* and *Amdocs*, both of which address the inventive concept analysis.

In *Bascom*, the Federal Circuit addressed a claim for a particular type of internet content filtering. *Bascom*, 827 F.3d at 1350. The Federal Circuit noted that internet content filtering was a generic concept, but that it had faced a number of technological issues. *Id.* Specifically, in one type of content filtering, the program would be executed on end-user computers. *Id.* While this configuration allowed customizability of the filters for each end user, the execution on the end-user's computer meant that tech-savvy individuals could bypass the filters. *Id.* In contrast, other types of content filtering implemented the filtering at the internet service provider, which prevented tampering, but would not allow customizable filtering settings for each end-user. *Id.* The invention in *Bascom*, however, combined the benefits of each of these filtering methods by "install[ing] a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user." *Id.* To do so, it "harness[ed] [a] technical feature of network technology": "the ability of at least some ISPs [(internet service providers)] to identify individual accounts that communicate with the ISP server, and to associate a request for Internet content with a specific individual account." *Id.* By combining this technical feature with content filtering, it claimed a specific, "technology-based solution" that "overc[ame] preexisting problems with other Internet filtering systems." *Id.* at 1352. Thus, even though the filtering of internet content was a generic abstract idea, this "non-conventional and non-generic arrangement of known, conventional pieces" created an inventive concept. *Id.* at 1350.

Moreover, in *Amdocs*, the Federal Circuit found that claims relating to solutions for managing accounting and billing data over large, disparate networks recited an inventive concept because they contained “specific enhancing limitation[s] that necessarily incorporate[d] the invention’s distributed architecture.” *Amdocs*, 841 F.3d at 1301. The use of a “distributed architecture,” where information about accounting and billing data was stored near the source of the information in the “disparate networks,” transformed the claims into patentable subject matter by providing improvements in functionality. *Id.* Notably, the claims themselves only referred to the application of “enhance[ments]” and did not discuss this “distributed architecture.” *Id.* However, the prior claim construction by the district court made clear that the enhancements integrated the architecture defined in the specification. *Id.* Thus, the Federal Circuit concluded that “the technology at issue entail[ed] an unconventional technological solution (enhancing data in a distributed fashion) to a technological problem (massive record flows which previously required massive databases).” *Id.*

Here, the Court first discusses whether the asserted claims’ “buddy list” or “use specific group,” combined with the generic request and receive functions described in the claims, provide a sufficient inventive concept to survive a motion to dismiss. As in *Bascom*, the Court finds guidance in the specification regarding what was conventional at the time of the invention. *Bascom*, 827 F.3d at 1350. The specification of the X One Patents describes certain problems in the conventional GPS tracking technology that the X One Patents aimed to cure. The specification described two pieces of prior art: (1) the use of OnStar to track cars with GPS, which relied on “GPS receivers and cellular phone capability built into a car;” and (2) “phones that were set up at the manufacturer to enable parents to locate their children.” *See* ’593 patent at col. 1:33–34, col. 1:54–55. The specification notes that, in this prior art, “there [was] no mechanism to add groups and members of groups, and there [was] no mechanism to set up ‘instant buddies’ as that term is used below (temporary location sharing between phones on an ask and accept basis which automatically expires after a configurable interval terminates).” *Id.* at col. 1:62–66. Instead, the pairing between tracker and trackee had to be permanently set at the time of manufacture. *Id.* at

1 col. 1:49-52.

2 The invention's solution to this problem is the use of a dynamic "buddy list" or "use-
3 specific group," which could be "programmed into a . . . device." *Id.* at col. 2:53-54. This
4 enabled "users [to] change things on the fly in the field such as by "adding groups and members;
5 adding instant buddies, changing the size of the area in which their buddies can be tracked,
6 enabling or disabling the location sharing function without disabling the phone, etc." *Id.* at col.
7 3:20-25.

8 The term "buddy list" from claim 19 of the '593 patent and the term "use specific group"
9 from claims 22 and 28 of the '647 patent, when viewed in light of the specification shared by both
10 the '593 patent and the '647 patent, refer to the same inventive concept. *See Amdocs*, 841 F.3d at
11 1301 (integrating the architecture outlined in the specification to define the term "enhance"). For
12 example, the specification describes the "buddy list" as a dynamic, reconfigurable, electronic list,
13 which is stored on the "Buddy Watch" server or on each wireless device. '593 Patent at col.
14 11:35-37. The specification notes that "Buddies can be added or deleted from a list at any time,"
15 and that a user can only "receive position updates" from users listed on the buddy list. *Id.*

16 Similarly, with respect to the '647 patent, the term "use specific group" does not appear in
17 the specification. The specification provides an avenue for the creation of "instant buddies,"
18 which is a method equivalent to the "use specific group" described in claims 22 and 28 of the '647
19 patent. *Id.* Such buddies can be formed "where the wireless device places or receives a call from
20 a Buddy Watch enabled wireless device to or from another Buddy Watch enabled wireless
21 device." *Id.* Thus, both "buddy list" and "use specific group" do not simply refer to lists, but to a
22 specific means of dynamically adding people that can be tracked. Moreover, the specification
23 states that the wireless devices communicate with the Buddy Watch server "via the internet" via
24 "TCP/IP data compliant packets," and describes several instances where updates to buddy list
25 information on the Buddy Watch server are effectuated through "packet" communications. *See,*
26 *e.g., id.* at col. 14:7-12, 14:57-63. Thus, the system appears to leverage the certain technical
27 capabilities of the phones—the fact that they are "web-enabled"—to effectuate the dynamic nature

1 of the “buddy list.”

2 Combining the dynamic “buddy list” and “use specific group” systems to GPS tracking
3 constitutes a “non-conventional and non-generic arrangement of known, conventional pieces.”
4 *Bascom*, 827 F.3d at 1350. Even assuming the buddy list and use specific group functionality
5 described above are each conventional on their own, the information in the specification indicates
6 that the combination of a buddy list or use specific group with GPS tracking is not conventional.
7 *See* ’593 patent at col. 1:62–66. Instead of requiring a manufacturer to permanently link the two
8 wireless devices, as in the child-tracking prior art, the users of the X One Patents can add or
9 remove persons being tracked through modifications of the buddy list or through the creation of a
10 use specific group. Accordingly, the claims “harness[] [a] technical feature of network
11 technology”—a buddy list that has the ability to be created and modified by users at any time—to
12 provide a “technical improvement over prior art ways of [gathering, transmitting, and displaying
13 the location information of a certain subset of individuals from a list or individuals requested to
14 perform a service].” *Bascom*, 827 F.3d at 1350. The buddy list itself also leverages certain
15 technical features of the devices in the system. The dynamic nature of the buddy list and the use
16 specific group is enabled by the facts that the devices are “web-enabled,” have a certain amount of
17 memory, and can run certain software. *See id.* (noting that the invention “leveraged” the already
18 existing abilities for ISP servers to allow individuals to login). Accordingly, the combination of a
19 dynamic buddy list or use specific group and GPS technology transforms the abstract idea of the
20 gathering, transmission, and display of the location information of a certain subset of individuals
21 from a list or individuals requested to perform a service into a “specific, discrete implementation”
22 of this idea that is sufficient to qualify as patent-eligible subject matter. *Id.*

23 Moreover, the implementation of the dynamic “buddy list” and “use specific group” allows
24 for the two-way sharing of information, a feature not available in the conventional technology.
25 *See* ’593 patent at col. 1:62–66 (noting that the OnStar and child-tracking prior art did not allow
26 for two-way sharing). Defendant points out that the claims are worded in such a way as to
27 indicate merely one-way information sharing. Mot. at 12. However, the methods described in

claims 22 and 28 of the '647 patent involve methods that allow sharing between a "first wireless device and the second wireless device," which indicates that the first and second wireless devices are interchangeable. '647 patent at col. 31:37–col. 32:5. Similarly, claim 19 of the '593 patent allows a "first individual" to "obtain a last known position for multiple users identified by the buddy list," which indicates that each of those multiple users can be the "first individual" tracking all of the other multiple users on the buddy list. This interpretation is confirmed by the specification itself, which indicates that location information is transferred both to and from each user in the buddy list. '593 patent at Fig. 3A & 3B (flowchart indicating the two-way flow of information).

In response, Defendant argues that the use of "lists" to track the individuals was already present in prior art that was disclosed on the face of the patent in this case. *See* ECF No. 24-3, U.S. Patent No. 7,116,985 (disclosing an invention that allows user to "identify the locations of select individuals" on a "friends list"). However, the fact that prior art already accomplished the combination of a list of individuals as part of GPS tracking does not necessarily prevent the Court's finding of an inventive concept. Generally, "[t]he 'novelty' of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter." *Intellectual Ventures B*, 838 F.3d at 1315 (quoting *Diehr*, 450 U.S. at 188–89); *see also Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1052 (Fed. Cir. 2016) (rejecting the argument that adding a second freeze-thaw cycle was not an inventive concept because it was allegedly obvious, reasoning that "patent-eligibility does not turn on ease of execution or obviousness of application. Those are questions that are examined under separate provisions of the Patent Act." (citing *Mayo*, 566 U.S. at 90)). Instead, the question on step two of *Alice* is whether the implementation of the abstract idea involved "more than the performance of 'well-understood, routine, [and] conventional activities previously known to the industry.'" *Content Extraction*, 776 F.3d at 1347–48 (quoting *Alice*, 134 S. Ct. at 2359). However, both the United States Supreme Court and the Federal Circuit have acknowledged that "the § 101 patent-eligibility inquiry and, say, the § 102

novelty inquiry might sometimes overlap.” *Synopsys*, 839 F.3d at 1151 (quoting *Mayo*, 566 U.S. at 90).

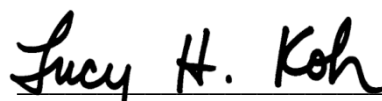
The Court acknowledges that, in light of the above-mentioned prior art, this case presents a close call as to whether the asserted claims involve “more than the performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Content Extraction*, 776 F.3d at 1347–48 (quoting *Alice*, 134 S. Ct. at 2359). However, on a motion to dismiss the Court “construe[s] the pleadings in the light most favorable to the nonmoving party.” *Manzarek*, 519 F.3d at 1031; *see also Content Extraction*, 776 F.3d at 1349 (approving the district court’s construction of a claim in the manner most favorable to the patent owner). Moreover, as discussed above, the Federal Circuit’s recent decisions in *Bascom* and *Amdocs* indicate that the combination of the dynamic “buddy list” or “use specific group” with GPS technology does provide an inventive concept that satisfies step two of *Alice*. Accordingly, the Court DENIES Defendant’s motion to dismiss.

IV. CONCLUSION

For the foregoing reasons, the Court DENIES Defendant’s motion to dismiss.

IT IS SO ORDERED.

Dated: March 6, 2017



LUCY H. KOH
United States District Judge